

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-19. (previously canceled)

20. (previously presented) In a computer system a method for characterizing an investment portfolio, comprising the steps of:

inputting data for taxable investments;

inputting data for non-taxable investments;

inputting investor profile information;

providing a processor programmed to perform an optimization which includes the data for the taxable investments, the data for the non-taxable investments and the investor profile information and which takes into account capital gains or losses on taxable investments which would be sold;

outputting an investment recommendation;

wherein the optimization comprises performing an iterative non-linear optimization routine, and the optimization routine comprises a first subroutine of attempting to resolve a flat function problem by running the routine with different sets of initial values, and the optimization routine further includes a second subroutine;

wherein when the flat function does not optimize with any of the sets of initial values used in an initial step, the second subroutine is utilized, wherein the second subroutine includes: taking a solution for a best case; and re-running the optimization routine including only those investments with nonzero weights; and

wherein when an optimal solution is found using the first subroutine, performing a third subroutine of re-running the optimization routine to account for minimum investment values; and

wherein when an optimal solution is found using the second subroutine, performing the third subroutine of re-running the optimization routine to account for minimum investment values.

Claims 21-26. (previously canceled)

27. (new) The method of claim 20, further comprising providing the first subroutine with three sets of initial values which are run by the first subroutine.

28. (new) The method of claim 20, wherein when an optimal solution is found using the first subroutine, the third subroutine operates to generate a first solution by performing a first optimization which uses a first set of constraints to account for minimum investment values, and the third subroutine operates to generate a second solution by performing a second optimization which uses a second set of constraints to account for minimum investment values.

29. (new) The method of claim 28, further comprising selecting between the first solution and the second solution, and wherein the output investment recommendation is based on the selected one of the first solution and the second solution.

30. (new) The method of claim 20, wherein when an optimal solution is found using the first subroutine, the third optimization routine provides for performing a first optimization where for each nonzero weight investment of a plurality of nonzero weight investments, a lower bound is set which corresponds to a respective investment amount minimum for each nonzero weight investment, and wherein the performing the first optimization provides a first solution;

wherein the third optimization routine provides performing a second optimization where for a nonzero weight investment which has a weight which is less than a minimum investment amount, an upper bound for the nonzero weight investment is clamped to zero, and wherein performing the second optimization provides a second solution; and

the third optimization routine includes selecting between the first solution and the second solution, and the output investment recommendation is based on the selected one of the first solution and the second solution.